

PATENT APPLICATION OF  
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FOR  
PACKAGING FOR ORAL HYGIENE DEVICES

#### **BACKGROUND-FIELD OF INVENTION**

The present invention relates generally to a packaging for oral hygiene devices. More specifically the present invention is a packaging for dental floss, toothpick, and mouthwash.

#### **BACKGROUND-DESCRIPTION OF RELATED ART**

Oral hygiene, although its importance is well known, is often neglected because of the inconvenience of carrying the various devices and chemicals to properly perform the necessary process. Devices such as toothpicks and dental floss are small and delicate to carry on one's person and to keep sanitary. Although only a small amount of mouthwash is required to maintain oral hygiene, one often must carry a much larger quantity than necessary and must keep carrying the unused portion after each use.

Some previous devices attempt to minimize this inconvenience by repackaging the dental floss in a more convenient and easier to use package or by combining two of the devices, such as a toothpick and dental floss, into one compact unit. Examples of the repackaged dental floss can be seen in US Patent Nos. 5,174,314, 6,234,182, and 4,836,227. Examples of combination of two devices can be seen in US Patent Nos. 4,403,625 and 5,915,392.

US Patent No. 5,174,314 discloses a sealed hollow plastic tube with a reduced diameter along a portion of its length and encloses a dental floss with two free ends that each attaches to a bulk of material with dimensions larger than the reduced diameter of the hollow plastic tube. When the hollow plastic tube is broken at the reduced diameter portion into two pieces and pulled apart, the dental floss enclosed within them is exposed for application. US Patent No. 6,234,182 discloses a holder with two interconnected but separable holder in the general shape of an elongated rod-like body with a dental floss anchored to the two ends and received in a narrow groove along the holder. When the two portions of the holder are separated the dental floss is revealed for application. US Patent No. 4,836,227 discloses a hollow housing with a length of stretchable dental material enclosed within it such that when the hollow housing is broken open and pulled apart, the stretchable dental material is stretched into a small cross-section to be used as a dental floss. These single function devices allow the user to hold and apply the dental floss. However, all of these devices only have the function of a dental floss and nothing else.

US Patent No. 4,403,625 discloses an elongated wooden toothpick with two pointed ends and divided into two separable sections with a small cavity near the division enclosing a length of dental floss attached to the two separable sections. When the two sections are separated, the dental floss may be utilized by holding the two separated sections. US Patent No. 5,915,392 discloses a toothpick with two pointed ends and a hollow interior formed by rolling a thin layer

of wood with a length of dental floss enclosed within the hollow interior and attached to the two ends of the toothpick. When the two ends are separated, the dental floss is exposed for application. Both of these devices use a body in the form of a toothpick with two pointed ends to enclose the dental floss and to hold the dental floss for application. However, these devices are an inherent danger to the person carrying these devices. The exposed pointed ends of the toothpick can easily pierce a person's skin and the toothpick itself is susceptible to contamination and will require an additional packaging to protect it.

As is clearly seen, the prior devices have limited application and may be inherently dangerous to the person carrying them. Furthermore, none of the prior devices has the means to enclose and also dispense liquids such as mouthwash.

## SUMMARY OF THE INVENTION

The packaging for oral hygiene devices comprises of a sealed elongated housing with an opening means and encloses a predetermined length of dental floss with its two ends affixed to the two ends of the sealed elongated housing and an elongated member with one or more pointed ends wherein when the sealed elongated housing is separated into two sections by the opening means, the elongated member with one or more pointed ends is exposed to be used as a toothpick and the length of dental floss is also exposed to be used by holding the two sections of the sealed elongated housing. A liquid, such as a mouthwash may also be enclosed within the sealed elongated housing along with the dental floss and the elongated member.

## BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows the preferred embodiment of the packaging for oral hygiene devices.

Figure 2 shows another embodiment of the packaging for oral hygiene devices.

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Figure 1 shows the preferred embodiment of the present invention. In the preferred embodiment, the packaging for oral hygiene devices comprises of a sealed elongated housing **1** with two blunt ends **2, 3** with an opening means **4**, preferably a weakened section such as a score line near the center of the sealed elongated housing **1**, and enclosing a predetermined length of dental floss **5** with its two ends affixed to the two ends **2, 3** of the sealed elongated housing **1** and an elongated member **6**, preferably a toothpick, with one or more pointed ends. When the sealed elongated housing **1** is separated into two sections by the opening means **4**, the elongated member **6** with one or more pointed ends is exposed to be used as a toothpick and the length of dental floss **5** is also exposed to be used by holding the two separated sections of the sealed elongated housing **1**. A liquid or cream, such as a mouthwash or mouth freshener may also be enclosed within the sealed elongated housing **1** along with the dental floss **5** and the elongated member **6**.

The packaging for oral hygiene devices may have only the dental floss **5**, only the elongated member **6** with one or more pointed ends, either with or without the liquid or cream enclosed in the sealed elongated housing **1**. The packaging for oral hygiene has the advantages of being easy to carry, sanitary, and safe. The completely enclosed dental hygiene devices **5, 6** are sealed from contaminations until the package is opened. Furthermore, after the dental hygiene devices **5, 6** are used and any liquid or cream such as mouthwash is consumed, the entire compact packaging may be easily disposed of. The user does not need to carry any excess quantities of the liquid.

Figure 2 shows another embodiment of the packaging for oral hygiene devices. This embodiment of the packaging for oral hygiene devices comprises of a sealed elongated housing 1 with two blunt ends 2, 3 with an opening means 4, preferably a weakened section such as a score line near the center of the sealed elongated housing 1, and enclosing a predetermined length of dental floss 5 with its two ends affixed to the two ends 2, 3 of the sealed elongated housing 1 and an elongated member 7, preferably a toothpick, with a first pointed end 8 and a second end affixed to one end 2 of the sealed elongated housing 1 and with the first pointed end 8 extending past the opening means 4. When the sealed elongated housing 1 is separated into two sections by the opening means 4, the first pointed end 8 of the elongated member 7 is exposed to be used as a toothpick and the length of dental floss 5 is also exposed to be used by holding the two separated sections of the sealed elongated housing 1. A liquid or cream, such as a mouthwash or mouth freshener may also be enclosed within the sealed elongated housing 1 along with the dental floss 5 and the elongated member 7.

Although the description above contains many specificities, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the presently preferred embodiments of this invention. Thus the scope of the invention should be determined by the appended claims and their legal equivalents, rather than by the examples given.